

A Clinical Study on Role of *Singhnada Guggulu*, *Guduchi* and *Sanshodhan Karma* in Cases of *Vatashonita* w.s.r. to Gouty Arthritis

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Abstract

Aim: To evaluate the comparative efficacy of Sanshaman regimen with or without Sanshodhan in cases of Vatashonita.

Introduction: Present day joint disorders are becoming a burning problem in society which causes disability of a person as well as nation, Vatashonita(i.e. Gouty arthritis) is common among them..

Settings and Design: For the present clinical study 44 patients were selected, however the therapeutical assessment was done on 40 patients. The patients having i.e. Pain, Swelling and tenderness in Joints, Stiffness/Restricted movements of Joints with or without Burning sensation & discoloration of the skin of affected Joints and patients with increased serum uric acid were selected for present clinical study.

Materials and method: All patients were divided in two groups -Group-A- 22 patients were kept only on Shaman regimen. Singhnada Guggulu – 1 gm BD/ day for a period of 4 month and Guduchi Kwath– 40 ml twice daily.Group-B- 18 patients were kept on Sanshodhanoprant Shanshman regimen.

(a) Snehanpan – (Guduchiadi taila) for 3-5 days. (b) Virechana – with Virechana kalp yoga.

(c) Vasti karma –A series of 9 Vasti were given to patient, 6Anuvasana & 3Niruha Vasti .

Statistical analysis used: p value, paired ‘t’ test, unpaired ‘t’ test, χ^2 etc.**Results:** The trial drugs shows a significant results in terms of improvement in clinical & pathological parameters and no any side effect has been observed.

Conclusion:Sanshodhanoprant Sanshaman group had shown better results than Sanshaman group, so it’s suggested that Sanshodhan chikitsa prior to taking Sanshaman chikitsa is of great importance.

Keywords

Vastikarma, Guduchi, Sanshodhan, Singhnada Guggulu, Vatashonita



Greentree Group

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INTRODUCTION

Ayurveda is not just a system of medicine but also a science of Health promotion, designed to increase our well-being and happiness in all aspects.

In recent years, the miscellaneous groups of disease primarily involving the musculoskeletal structures have been the subjects of intense study. Various such diseases are responsible for much temporary or permanent disablement. The disease vatashonita is one of them.

This study was designed to compare the efficacy of Samshaman and Samshodhanoparant Samshaman regimen in patients of Vatashonita (Gouty arthritis).

In vatashonita, both Vata and Rakta are vitiated simultaneously by their own etiological factors and vitiated vata obstructed the raktavaha srotas which leads to various symptoms of disease¹.

Various synonyms of the Vatashonita are Khuddavata, Adhyavata and Vatabalas².

Aetiological factors³ and Purvaroopas of vatashonita⁴ are described in details in Ayurvedic classics.

The disease vatashonita usually starts from padamula occasionally from hastamula later on affecting other parts of body⁵. It is characterized by recurrent attacks of acute

pains, inflammation, tenderness, stiffness, decreased/restricted movements, redness, itching, burning sensation and skin discoloration in the affected Joints ultimately leads to different kind of deformities⁶.

In 1848 Dr. A.V.Garod from London, first of all recognized that there is increase in serum uric acid level in patient of gout. Gout is a disorder of purine metabolism and featured as podagra, redness, tenderness, swelling, skin discoloration, etc⁷.

Before designing the regimen for management of vatashonita, the concept of chikitsa in general was also discussed. Vasti with oil is best treatment and it should be employed frequently after snehyukta mridu virechan⁸. There is no treatment in comparison of vasti for the treatment of vatashonita⁹.

Considering the all above facts and entire survey of classical literature was performed in this research and we designed and evaluated the comparative effects of samshaman and samshodhanoparant samshaman regimen.

MATERIALS AND METHODS

For the present clinical study 44 patients were randomly selected from O.P.D. / I.P.D.

department of Kaya-chikitsa State Ayurvedic College and Hospital, Lucknow from March 07 to November 07 and randomly divided it into two groups out of which 4 were drop out. So that statistical analysis was done on 40 patients.

Selection of patient: Following symptoms were observed in each enrolled Patient. According to textual description and patients having 50% or more of the following clinical symptomatology with joint pain and increased serum uric acid were selected for present clinical study.

Symptoms⁶:

- Sandhishu ruka (pain In joints)
- Sandhishu swathu (swelling in joint/joints)
- Sandhishu stabdhata (stiffness of joint/joints)
- Sandhishu kathinya (decreased/restricted movements of joint)
- Sandhishu sankoch(deformities of the joints)
- Sandhishu kandu(itching in the affected joints)
- Sandhishu daha (burning sensation in affected joints)
- Sandhishu twagbahay tamra (blackish, red or coppery discoloration of the skin of affected joints)

Exclusion criteria of the patient:

- Patients suffering from rheumatoid arthritis, osteoarthritis, tubercular joint, leprosy or psoriasis, SLE, pregnant women, lactating mother and other systemic disorders (uncontrolled BP, Diabetes mellitus and disease of major organs)
- Complicated cases of Vatashonita by its updravas like hikka, moorchha, moha, visarpa etc¹⁰.

Criteria of assessment:

The result of treatment was assessed on the basis of improvement in the clinical symptoms and decreased in serum uric acid level.

Grouping of the patients: All the patients registered for the clinical trial were divided into two groups -

(1) Group-A- 25 patients was kept only on Shamshaman chikitsa, for that we had selected Singhnada guggulu¹¹ 1-2 tab (1 gm) twice a day after meal and Guduchi kwath¹² – 40 ml twice daily after meal for a period of 4 month. Guduchi described as best drug of choice for the disease Vatashonita¹³.

(2) Group-B - 19 patients were kept on Samshodhanoprant Shamshman regimen. Before taking Shamshman regimen patient

were undergone through Shamshodhan regimen.

For Shamshodhan chikitsa,

(a) Snehan – Guduchiadi taila¹⁴ -20ml for 3-5 days.

(b) Virechana –With virechana kalp yoga (Aaragvadha and trivrita in equal amount).

Dosage is decided as kosta prakriti of patient. Aaragvadha which is said to be the drug of choice for Mridu Virechana in vatashonita¹⁵.

(c) Vasti karma –After 9 days of virechana a series of 9 vasti were given to patient, 6 anuvasana and 3 niruha vasti. Anuvasan vasti is given with Guduchiadi Taila and niruha vasti with guduchi kwath in increasing amount gradually.

However it is clarified that a 2nd course of Samsodhan regimen were administered after the parihar Kala of 1st schedule of vasti chikitsa i.e. after 18 days of last vasti and same as 1st schedule.

Lab investigation: Routine Investigation:

Blood - TLC, DLC, Hb%, ESR

Urine - Routine and Microscopic

Stool - For ova cyst

Specific Investigation: Serum uric acid

In the present clinical trial total 44 patients were registered. Out of which 40 patients completed the full course of trial but 4 patients left the trial in between without prior information. Therefore, the present data are analyzed on the basis of total 40 patients, out of which 22 patients of group A and 18 patients of group B.

Aetiological observation: In this study,

It was found that the age group of 41-50 years comprises the maximum number of patients 18 (41%)

According to sex 28 (63.64%) patients were male and 16 (36.36%) patients were female.

Occupation, Educational status, Economic Status, Residential and Environmental condition plays a very important role in the causation of disease. Service class 19 (43%), literate 37(84%), high-income group 24(55%) urban living style 37(84%) are highly prone to develop the disease vatashonita.

Considering the Addiction habit 14(32%) patients having no addiction followed by 10(22%) alcoholic, 9(21%) patient's tobacco chewing, 8(18%) patients in tea/coffee and 3(7%) patients have smoking habit.

Considering the Past history maximum patients 21(48%) and Family history

RESULTS AND OBSERVATION

maximum patients 22(50%) were having no history.

Regarding the Dietary factors and Appetite of patients maximum no. of patients 31(70%) were from mixed diet and 28(64%) had normal appetite.

Considering the Duration of illness maximum patients 17(38%) was having the history of illness between 1 to 5 years.

Considering the Nature of onset, involvement of joints and initial involvement of joints maximum no. of patients 32(73%) were having acute onset and asymmetrical involvement of joints and 23(52%) patients having Great toe (Metatarsophlangeal joint) was the most common involved of joint.

Considering the prakriti, kosta prakriti and agni of patients that maximum no. of patients 28(64%) were of Vata-Pittaj prakriti, 34(77%) having Madhyam Kosta and 25(57%) patients have vishamagni in comparison to Mandagni 15(34%).

Incidences of seasonal variation were high in months August and September i.e. Varsha and Sharad ritu 23(52%).

Clinical observations:

All the registered patients were clinically analyzed according textual description. A

thorough physical and systemic examination has been done.

Therapeutical observations:

The drug regimen has shown their effect in almost all the symptomatology.

Sandishu Ruka (pain in joints) was present in 22 (100 %) in Group-‘A’ and 18 (100 %) in Group-‘B’ cases before the treatment. After treatment 15 patients (68.18%) in Group-‘A’ and 15 patients (83.33%) in Group-‘B’ were relieved. 7 patients in Group-‘A’ and 3 patients in Group-‘B’ were improved. Sandhishu Swathu (Swelling in Joints) was present in 21(95.5 %) cases in Group-‘A’ and 18(100%) cases in Group-‘B’ before the treatment. After treatment 16 patients (76.19%) in Group-‘A’ and 16 patients (88.88%) in Group-‘B’ were relieved. 4 patients in Group-‘A’ and 2 patients in Group-‘B’ were improved. Sandhishu Stabdhat (stiffness of joints) was present in 20(90.90%) cases in Group-‘A’ 16(72.73%) cases in Group-‘B’ before the treatment. After treatment 16 (80.00%) patients in Group-‘A’ and 15 (93.75%) patients in Group-‘B’ were relieved. 3 patients in Group-‘A’ and 2 patients in Group-‘B’ were improved. Sandhishu Kathinya (Restricted movement of joints) was present in 19(86.36%) cases in Group-

'A' and 15(83.33%) cases in Group-'B' before the treatment. After treatment 18(94.73%) patients in Group-'A' and 15 (100 %) patients in Group-'B' were relieved. 1 patients in Group-'A' was improved. Sandhishu Kandu (itching in the joints) was present in 17(77.27%) cases in Group-'A' 16(88.88%) cases in Group-'B' before the treatment. After treatment all the patients in both Groups were relieved. The response was observed as 100 %. Sandhishu Daha (Burning sensation in the joints) was present in 20(90.90%) cases in Group-'A' 17(94.44%) cases in Group-'B' before the treatment. After treatment of four months 18 (89.73%) patients in Group-'A' and 17(100 %) patients in Group-'B' were relieved. Sandhishu Sankoch (joint deformities) In Group-'A' No patient of this symptom was registered. In Group-'B' this Symptom was present in 3(16.66%) cases before the treatment. After treatment 2 patients (66.66 %) were relieved and 1(33.33%) patient was improved. Sandhishu twagbahay tamra (Skin discolouration) was present in 6(27.27%) cases in Group-'A' and 8 (44.44%) cases in Group-'B' before the treatment. After treatment 4 (66.66%) patients in Group-'A' and 6 (75%) patients in Group-'B' were relieved. 2 (33.33%)

patients in Group-'A' and 2 (25%) patients in Group-'B' were improved. It was clearly observed that this symptom was relieved in both the Group 'A' and 'B' (Table no.-1)

Statistical Assessment:

Statistical data shows that significantly improvement ($P < 0.001$) in symptoms in both groups but not statically significant intergroup comparison. (Table no.-2)

Pathological Assessment:

Biochemical assessment of serum uric acid was done before and after the completion of treatment. There was statistically significant ($P < 0.001$) improvement in serum uric acid level in both the group. Most of the patient have serum uric acid level within the normal limit after the completion of regimen and follow up period. (Table no.-3 & Figure -1, 2, 3)

The Comparative study of the Symptomatology as well as the pathological investigation were performed before and after treatment provided following results-

Group 'A'- Arogya (Relieved) – 14 (63.63 %)

Kinchit Arogya (improved) – 7 (31.82%)

Anarogya (not improved) – 1 (4.54%)

Group 'B'- Arogya (Relieved) – 14 (77.77%)

Kinchit Arogya (improved) – 4 (22.22%)

Anarogya (not improved) – 0 (0%)
During the trial of treatment no any side effect has been observed.

So the trial treatment shows significant results in terms of improvement in symptoms and clinical and pathological parameters.

Table 1 “Showing comparison of improvement of symptoms in both groups A and B”

S. No	Sign and Symptoms	No. of Patients									
		Group ‘A’					Group ‘B’				
		B.T.	A.T.		Improved	%	B.T.	A.T.		Improved	%
Absent	%	Absent	%								
1.	Sandhishu ruka	22	15	68%	7	31.8%	18	15	83%	3	17%
2.	Sandhishu swathu	21	16	76%	5	23.8%	18	16	89%	2	11%
3.	Sandhishu stabdhata	20	16	80%	4	20%	16	15	94%	2	12%
4.	Sandhishu kathinya	19	17	90%	2	5%	15	15	100%	0	0%
5.	Sandhishu kandu	17	17	100%	0	0%	16	16	100%	0	0%
6.	Sandhishu daha	20	18	90%	2	10%	17	17	100%	0	0%
7.	Sandhishu sankoch	0	0	0%	0	0%	3	2	67%	1	33%
8.	Sandhishu twagbahay tamra	6	4	67%	2	33%	8	6	75%	2	25%

Table 2 Significance of treatment on different signs and symptoms

S. No.	Name of Symptoms	Statistical Assessment				Showing comparison of significant difference between ‘A’ and ‘B’
		Group ‘A’		Group ‘B’		
		χ^2	P value	χ^2	P value	
1.	Sandhishu ruka	112.75	P<0.001 Significant	103.15	P<0.001 Significant	Z = 1.1, P= 0.14 NS
2.	Sandhishu swathu	88.12	P<0.001 Significant	75.13	P<0.001 Significant	Z = 1.04, P= 0.15 NS
3.	Sandhishu stabdhata	54.73	P<0.001 Significant	51.41	P<0.001 Significant	Z = 1.25, P= 0.11 NS
4.	Sandhishu kathinya	44.95	P<0.001 Significant	54.63	P<0.001 Significant	Z = 1.4, P= 0.08 NS
5.	Sandhishu kandu	51.21	P<0.001 Significant	59.16	P<0.001 Significant	Z = 0, P = 1 NS
6.	Sandhishu daha	74.19	P<0.001 Significant	70.15	P<0.001 Significant	Z = 1.4, P= 0.08 NS
7.	Sandhishu sankoch	-	-	5.06	P>0.005 NS	Test not used because

8.	Sandhishu twagbahay tamra	7.50	P>0.005 NS	11.72	P>0.005 NS	there is no pt. in gp. 'A' Z = 0.58, P= 0.28 NS
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Table 3 The effect of treatment on laboratory investigations

Investigation	Gp.	Mn ± SD		Inter group Comparison (Paired t test)	Inter group comparison (Unpaired t test)
		Before Tt.	After Tt.		
ESR	'A'	30.45±7.32	14.40 ±4.48	16.05±6.51 t = 11.57 P<0.001S	t = 0.49 P>0.05 NS
	'B'	30.33±8.38	15.72±5.38	14.61±11.58 t = 5.35 P<0.001S	
S. Uric Acid		6.76±0.63	4.90 ±0.77	1.86±0.72 t = 12.04 P<0.001S	t = 0.80 P>0.05 NS
		6.91±0.97	4.65±0.90	2.26±0.74 t = 12.82 P<0.001S	

Figure1 Showing effect of treatment on uric acid before and after treatment in patients of vatashonita

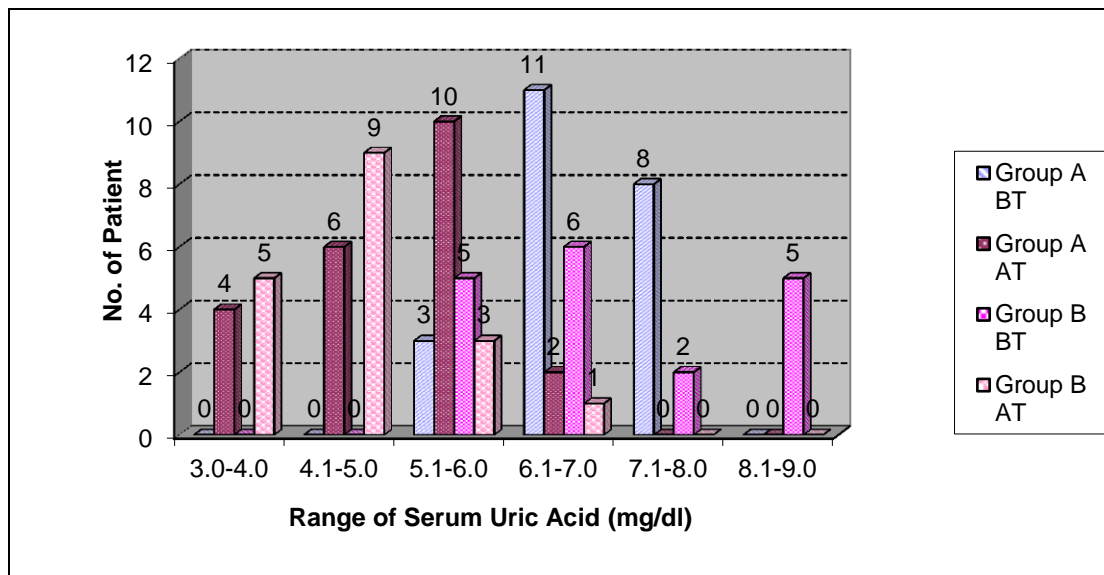


Figure 2 Mean of uric acid before and after the treatment

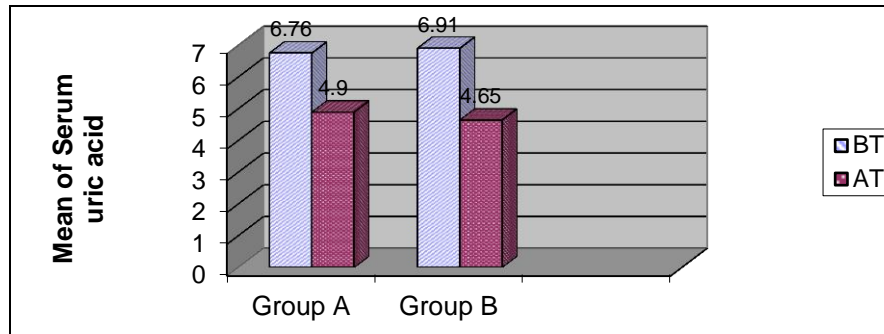
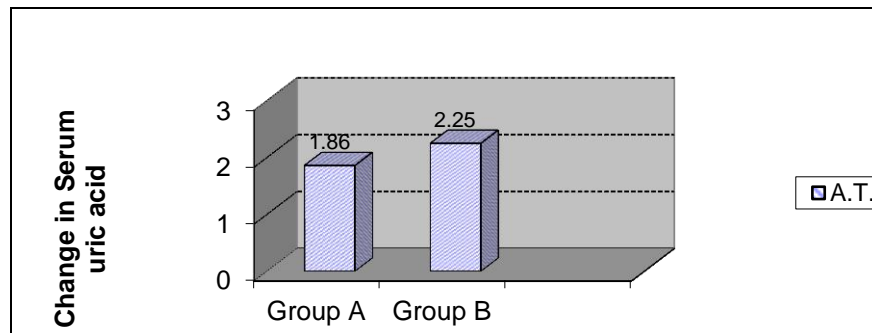


Figure 3 Comparison of change in uric acid after treatment in both group A & B



DISCUSSION

In present study we had considered the disease Vatashonita as gouty arthritis. Few points favoring vatashonita as gouty arthritis are shown below:

Regimen under Study (Pharmacodynamics and

S.No.	VATASHONITA	GOUTY ARTHRITIS
1.	Involvement of small joints especially padmula and occasionally hastamula ¹⁶	Involvement of smaller joints (Metatarsophalangeal and metatarsal joints)
2.	it spread's all over body like Rat's poisons ¹⁶	Acute onset
3.	Deep Agonizing pain	Intense pain described as worst pain
4.	Sparshachamtva, raga, shavathu,	Tenderness, red shiny skin, and oedema
5.	Blackish, red or coppery discoloration of the skin of affected Joints	Skin discolorations
6.	Frequent appearance and disappearance of pain in joints)	Attacky in nature
7.	Hot climate	Aggravates in hot and humid climates
8.	Aadhyavata	Commonly affecting the affluent peoples

pharmacokinetics of the regimen):

The present clinical trial consists of snehana, virechana, and vasti as samsodhana chikitsa and Singhnada guggulu, and Guduchi kwath as samshaman chikitsa. In group 'A' samshaman chikitsa was advocated and in group 'B' samshaman chikitsa along with samsodhana chikitsa was advocated.

Guduchi kwath contains only Guduchi. The action of Guduchi is tridosha shamak, it subsided vata due to snigdha and ushna guna, subsides kapha and pitta due to its tikta and kashaya rasa. It purifies the blood due to its rakta shodhak property and used in skin diseases. It is a Rasayana dravya mainly used as immunomodulator^{17,18}. It exerted a significant anti-inflammatory effect and its mode of action appeared to resemble that of non-steroidal anti-inflammatory agent so it is useful in relieving the symptoms of rheumatism especially Gouty arthritis (Vatashonita).

Singhnada guggulu contains Amalaki, Haritaki, Vibhitaki (Triphala), Gandhak, Erand taila, and Guggulu. Most of these drugs are tikta and kashya rasa pradhan, ushana veerya and madhur vipaka. Therefore it has tridoshashamak especially vata-pitta shamak, rasayan, vednastapak and shothhar properties. Guggulu the world fame

drug to pacify the dosha vata and are key drug of the samshaman regimen¹⁹. Most of the drugs used in the trial are vata pitta shamak and rakta shodhak.

Snehan produce snigdha (unctuousness), mriduta (softness), dravata (liquidity), pichchhilita (slimyness), vishyandan and kledan in the body or bodyparts²⁰. So it is indicated in all vatavyadhies and before performing samshodhan karma.

Virechana karma supposed to be a principle treatment for pitta dosha, "Virechana pittaharanam"²¹ and in vatashonita rakta dhatu is vitiated by pitta dosha. So that virechana karma is much effective in the treatment of vatashonita.

Vasti chikitsa supposed to be a principle treatment for vata dosha "Vasti vataharanam" and vasti is also most effective and ultimate way to treat the patients of vatashonita²².

Rectal absorption of water and electrolytes are much more than other routes. It helps to keep the alkaline media of colon. Rectum has no villi, so vasti dravya is retained for longer period. Vasti destroys the bacterial end products, toxins and enhances the vitamin formations (Vit. K, B1, B6, and B12). It controls the function of viscera by stimulation parasympathetic nerves (vagus

nerve). Vasti enhance the portal circulation and promotes detoxification process in the liver. Rectum is supplied by hypogastric plexus (sympathetic) and pelvic splanchnic plexus. There is also an independent nervous system of the intestine which is called enteric nervous system (ENS). ENS controlled the various metabolic functions of the intestine and is called a mini brain of the gut. Thus, vasti not only has local cleaning effect, it also has a systemic effect.

The importance of samshodhan chikitsa over samshman chikitsa also described in ayurvedic literature, that the dosha pacified with the help of Samshman regimen may recur but if eliminated with the help of samshodhan regimen there is no scope for recurrence as shodhan chikitsa cures the disease with curing its root causes²³.

CONCLUSION

Samshodhanoparant samshaman regimen proved much effective in comparison of Samshaman regimen.

On the basis of present clinical trial following conclusion have been drawn-

- Vatahoni is almost similar to that of gout of modern medicine.
- Both the regimen was given to the selected patients were well accepted and tolerated with good positive response. Statistically the result was not significant due to less no. of patient; however the response was higher in Group 'B' than Group 'A'.
- It is better to go through Samshodhan chikitsa before taking any Samshman regimen this may produce much better management of the disease. Thus the regimen may prove a valuable contribution from Ayurveda towards the ailing humanity.

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